

Abstract

It is an object of the invention to find a substance with a better taste-modifying function and determine the structure of the taste-modifying substance, as well as to elucidate the structure thereof at a gene level and determine the primary structure of the substance and obtain the gene encoding the substance. Additionally, it is an object of the invention to provide a novel taste-modifying composition characteristically containing the taste-modifying substance.

Specifically, the invention provides the polypeptide shown below in (A) or (B), a protein dimer neoculin comprising the polypeptide NAS and the polypeptide NBS and having a taste-modifying activity:

(A) a polypeptide comprising an amino acid sequence shown in SEQ ID NO.2 in the sequence listing;

(B) a polypeptide comprising an amino acid sequence with the substitution, deletion, insertion, addition or inversion of one or several amino acids in the amino acid sequence shown in SEQ ID NO.2 in the sequence listing, which polypeptide can form the neoculin dimer having a taste-modifying activity together with the polypeptide NBS.